national accelerator laboratory

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"HARDENING" OF THE SHIELDING BERM IN THE NEUTRINO LABORATORY

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The earth shielding berm in the Neutrino Area has been "hardened" by the addition of steel shielding in two locations.

a. Steel core for proposed A. Roberts magnet shield. This is an approximately 20" x 20" core centered on the neutrino axis at elevation 745'0". This is made up from ANL cast iron pigs approximately 10" x 4" x 5". The total length is 328'. 276 feet of this is stacked continuously from 17 feet downstream of the North wall of the Hadron Beam section of Enclosure 101. There is a 30-foot break where Batavia Road originally crossed the area, followed by the remaining 52 feet of pigs alongside Enclosure 102.

b. Interim shielding and "hardening' for Experiment 21, NAL/Caltech. This consists of 10 stacks with 36 steel "blooms" per stack, piled 6 "blooms" high by 6 "blooms wide. Each "bloom" is on the average approximately 1 foot high x 1 foot wide x 21-1/2 ft. long, for a total stack of approximately 6 ft. x 6 ft. x 215 ft., or approximately 2200 T of steel. A gap of approximately 1 foot has been provided upstream of the first stack and between stacks to allow insertion of counters for measuring the effective shielding.